Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
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Revision or Elimination of Rules Under the Regulatory Flexibility Act, 5 U.S.C. § 610	)	CB Docket No. BO 16-251
	)	
	)	

To: The Commission

COMMENTS OF ECHOSTAR SATELLITE OPERATING CORPORATION AND HUGHES NETWORK SYSTEMS, LLC

I. INTRODUCTION

EchoStar Satellite Operating Corporation ("ESOC") and Hughes Network Systems, LLC ("Hughes") (together with their affiliates, "EchoStar") submit these comments in support of the Commission's review of rules that may have a significant economic impact on small entities.[1] Section 610 of the Regulatory Flexibility Act of 1980, as amended (the "RFA"), directs the Commission to publish a plan for periodic review of rules that "have or will have a significant economic impact upon a substantial number of small entities."[2] Additionally, in determining "whether such rules … should be amended or rescinded … to minimize any significant economic impact," the Commission must consider factors such as "(1) the continued need for the rule; (2) the nature of complaints or comments received concerning the rule from the public; (3) the complexity of the rule; (4) the extent to which the rule overlaps, duplicates or conflicts with other Federal rules, and, to the extent feasible, with State and local governmental rules; and (5)

[1] *See FCC Seeks Comment Regarding Possible Revision or Elimination of Rules Under the Regulatory Flexibility Act, 5 U.S.C. Section 610,* Public Notice, 31 FCC Rcd 13053 (Dec. 28, 2016), *published in* 82 Fed. Reg. 9282 (Feb. 3, 2017).

[2] 5 U.S.C. § 610(a).

the length of time since the rule has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the rule."[3]

Accordingly, pursuant to its Section 610 mandate, the Commission issued a public notice seeking comment on certain rules, adopted in 2001 through 2004, that may have a significant economic impact on small entities, and whether any of these rules should be eliminated or revised to minimize their economic impact. EchoStar welcomes this opportunity to assist in the Commission's review of such rules, particularly those impacting satellite operators and their customers, both small and large.

ESOC and Hughes are both wholly owned subsidiaries of U.S.-based EchoStar Corporation, the largest U.S. commercial geostationary satellite operator and the fourth largest in the world. With its fleet of 26 owned, leased, and managed satellites — predominantly U.S.-authorized – and ground network facilities largely based in the United States, EchoStar provides broadband, video, and other services to meet the needs of small and large customers, including media and broadcast organizations, direct-to-home providers, enterprise customers, government service providers, and residential consumers in the United States and abroad.[4]

Through Hughes, EchoStar is the largest U.S.-based provider of satellite broadband services to more than one million U.S. and worldwide subscribers. With the successful launch of the EchoStar XIX satellite in December 2016, Hughes will soon offer FCC-defined broadband service across the continental United States and portions of Alaska. Its primary broadband market is providing service to customers in areas of the country that are unserved or underserved by terrestrial broadband. As the Commission has noted, 34 million Americans live in areas that

[3] 5 U.S.C. § 610(a)-(b).

[4] *See* EchoStar, *Satellite Fleet*, http://www.echostarsatelliteservices.com/SatelliteFleet/Fleet.aspx (last visited May 4, 2017).

lack terrestrial fixed, high-speed Internet access.[5] As the nation's leading satellite provider of consumer broadband, Hughes is filling the void in the market by deploying new and innovative broadband services to large pockets of unserved or underserved communities throughout the United States and the world.

As a global leader in providing broadband satellite networks and services for enterprises, governments, small businesses, and consumers, Hughes continues to develop innovative equipment for the world's communications market. Hughes pioneered the development of very small aperture terminals ("VSATs") and today remains the world's leading provider of enterprise VSAT services.[6] Hughes' VSATs contain integrated solutions for digital signage, video streaming, and content distribution. Hughes also designs and develops a wide range of mobile satellite systems terminals. For instance, the Hughes 9211-HDR is a broadband global area network terminal, which provides mobile satellite connectivity under the harshest conditions and is ideal for first responders, mobile healthcare, and public safety.[7] Additionally, Hughes' broadband appliances, such as the HR4700 Branch Gateway, are easy to deploy and provide enterprise-grade security, routing, broadband optimization technology, and many other services.[8]

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[5] *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, 2016 Broadband Progress Report, 31 FCC Rcd 699, ¶ 79 (2016) ("As of December 31, 2014, approximately 34 million (10 percent) of Americans lack access to fixed 25 Mbps/3 Mbps advanced telecommunications capability.").

[6] *See* HughesNet, https://www.hughesnet.com/why-hughesnet/news/comsys-report-confirms-hughes-leading-provider-vsat-industry (last visited May 4, 2017).

[7] *See* News Release, Hughes, *Hughes Announces 9211-HDR Portable BGAN Terminal for Inmarsat's High Data Rate Service* (Sept. 9, 2014), https://www.hughes.com/who-we-are/resources/press-releases/hughes-announces-9211-hdr-portable-bgan-terminal-inmarsats.

[8] *See* Hughes, HR4700 Branch Gateway, http://www.hughes.com/technologies/broadband-appliances/hr4700-branch-gateway (last visited May 4, 2017).

Given its long history as a U.S.-licensed and regulated provider of broadband and other services and products to U.S. and global consumers, EchoStar strongly supports the Commission's efforts to reform and streamline its rules to mitigate economic burdens imposed on regulated entities, both small and large, as well as their customers. EchoStar further urges the Commission to eliminate or revise certain requirements under Parts 2 and 25 of its rules, as proposed below and in the attached Appendix A (Proposed FCC Rule Revisions).

II. THE COMMISSION SHOULD ELIMINATE OR REVISE RULES THAT ARE DUPLICATIVE, EXCESSIVELY BURDENSOME, OR NO LONGER NECESSARY

A. Part 25 Rules

(1) 47 C.F.R. § 25.110(e) (filing of applications). The Commission should eliminate this subsection entirely. Under 47 C.F.R. § 1.10010, the electronic record of an application filed on the International Bureau Filing System ("IBFS") is the "official record." Thus, Section 25.110(e)'s requirement to keep an original paper copy of an electronically filed application should be deleted as obsolete and unnecessary, in view of the Commission's electronic filing rules (*e.g.,* 47 C.F.R. § 1.10010) and its experience with processing electronic application filings.

(2) 47 C.F.R. § 25.112(a)(3), (b) introductory text (dismissal and return of applications). The Commission should eliminate these provisions and allow consideration of applications for satellite operations in a frequency band not yet allocated internationally for such operations upon an appropriate showing that such use will not cause interference. Such an approach will enable U.S. operators to provide innovative services to U.S. customers without necessarily waiting for the completion of a multi-year World Radiocommunication Conference cycle. Indeed, terrestrial wireless operators already are afforded regulatory flexibility to apply for and obtain licenses to use spectrum not allocated internationally for such use, thus allowing

for early development of innovative spectrum technologies and prompt deployment of first-to-market services to consumers.[9] Maintaining such a prohibition, as applied to only satellite operators, thus creates regulatory disparity and unfair burdens not imposed on other wireless operators, and violates the principle of technology neutrality.

Prior to 2003, the Commission accepted applications for satellite use of spectrum prior to international allocations for such use.[10] The Commission's decision in 2003 to prohibit such applications, however, has resulted in delaying or preventing U.S. operators from providing innovative satellite services to consumers.[11] Such a blanket prohibition is unnecessary and contrary to the Commission's established waiver authority to permit "non-conforming" spectrum use (*i.e.,* not conforming to existing spectrum allocations) on an unprotected, non-interference basis.[12] Accordingly, the blanket prohibition should be el

(3) 47 C.F.R. § 25.114 (applications for space station authorizations). The Commission should revise Section 25.114 to provide an option to submit a streamlined application for a comprehensive FCC license authorizing both space and earth stations operating within the same network. The existing separate space/earth station licensing framework differs from the more unified licensing framework in which cellular and other terrestrial wireless operators are permitted to seek a comprehensive network license authorizing a variety of base

[9] For example, the Part 27 rules permit Miscellaneous Wireless Communications Service licensees to "provide any service for which its frequency bands are allocated [pursuant to the U.S. Table of Allocations]." *See* 47 C.F.R. § 27.2(a).

[10] *See Amendment of the Commission's Space Station Licensing Rules and Policies*, First Report and Order, 18 FCC Rcd 10760, ¶ 49 (2003).

[11] *See id.* ¶¶ 49-50.

[12] *See, e.g., Hughes Network Sys., LLC*, 26 FCC Rcd 8521, ¶ 13 n.33 (IB 2011) (quoting *Fugro-Chance, Inc.,* Order and Authorization, 10 FCC Rcd 2860 (IB 1995)); *L-3 Communs. Titan Corp.,* Memorandum Opinion, Order and Authorization, 24 FCC Rcd 3047, ¶¶ 8-10 (IB &OET 2009) (granting waiver to permit non-conforming MSS use on a non-interference, non-protected basis).

stations and user terminals within a defined geographic area.[13] By mandating separate space and earth station applications and authorizations, the current Part 25 rules thus impose undue restrictions (and costs) on a satellite provider's operational flexibility to configure and deploy its network of satellites, gateway earth stations, and earth terminals.

In addition, by having to seek separate authorizations, there is a significant amount of uncertainty added to the satellite licensing process. Specifically, satellite operators often design and construct their satellites for telemetry, tracking, and control ("TT&C") and feeder link communications with a ground network of gateway earth stations planned to be installed and operated at predetermined locations and technical parameters. Thus, to ensure reliable TT&C and feeder link communications, gateway locations and technical parameters, for the most part, are already set at the start of satellite construction and incorporated in the design of satellites. Accordingly, because satellites are typically constructed to account for planned gateway operations at predetermined locations and technical parameters, failure to secure the necessary gateway licenses could force an operator that has already commenced or completed satellite construction to incur significant redesign and construction costs, or else proceed with launching a sub-optimal satellite system.

Although operators could file license applications for satellites and gateways at the same, this often is not feasible because of the differences between the Commission's space station and earth station licensing requirements. For example, under the Commission's rules, gateway licenses are subject to much shorter construction periods than space station licenses, thus rendering it practically infeasible to file for both at the same time. Consequently, because

[13] *See, e.g.,* 47 C.F.R. § 22.165 (generally allowing cellular and other licensees in the Public Mobile Services to operate additional transmitters at additional locations on the same channel or channel block as their existing systems without obtaining prior FCC approval).

operators are required to seek space and earth station license separately (and often with substantial time lags of several years between those filings), grant of the space station license does not offer assurance that the necessary gateway licenses also will be granted. Indeed, as noted above, failure to obtain such gateway licenses could create a costly dilemma for satellite operators.

Accordingly, Section 25.114 should be revised to allow space station applicants to request additional authority to operate any earth stations communicating with the proposed space station(s) as part of the same communications network, and further specifying streamlined application requirements for a comprehensive network license. This will reduce administrative and economic burdens imposed on satellite providers and their customers under the existing rules and increase long-term certainty.

(4) 47 C.F.R. § 25.117(d)(1)-(3) (modification of station license). The Commission should revise these provisions to codify its longstanding presumption that the public interest is served by leaving fleet management decisions to satellite operators.[14] Indeed, the Commission routinely authorizes "satellite operators to rearrange satellites in their fleet to reflect business and customer considerations where no public interest factors are adversely affected."[15] Accordingly, Section 25.117(d) should be revised to reflect this fleet management flexibility policy by adding a new subsection (d)(4), as proposed in the attached Appendix A, to allow presumptive grant of modification applications seeking to relocate a GSO satellite to any orbital location available for

[14] *See AMSC Subsidiary Corp.*, Application for Modification of Mobile Satellite Service License and for Modification of Earth Station Licenses, Order and Authorization, 13 FCC Rcd 12316, 12318, ¶ 8 (1998).

[15] *See* SES Americom, Inc., Application for Modification of the AMC-16 Fixed-Satellite Service Space Station to Temporarily Vacate the 85º W.L. Orbital Location and for Telemetry, Tracking and Control Operations During Drift of the AMC-16 to and from the 118.75º W.L. Orbital Location, *Order and Authorization*, 21 FCC Rcd 3430, 3433, ¶ 8 (2006) ("AMC-16 Grant") (citing *Amendment of the Commission's Space Station Licensing Rules and Policies*, Second Report and Order, 18 FCC Rcd 12507, 12509 ¶ 7 (2003) ("*Satellite Licensing Second Report and Order*")).

assignment, subject to compliance with existing certification requirements regarding debris mitigation and station-keeping volume.

Similarly, the Commission should allow presumptive grant of modification applications seeking to relocate a GSO satellite to any available non-U.S. orbital location (*i.e.,* for operations in accordance with International Telecommunication Union filings by a foreign administration) under certain circumstances (*e.g.,* successful completion of international coordination). Although satellite providers have obtained FCC authorization to move satellites to non-U.S. orbital locations, extensive regulatory oversight can lead to long review times and uncertainty in decisionmaking, thus hampering regulatory certainty and fleet management flexibility. This disadvantages U.S. licensees vis-a-vis foreign licensees who can take advantage of business opportunities without this additional regulatory step. Consequently, the Commission should adopt a presumption in favor of modifications involving a satellite move to a non-U.S. orbital location, subject to compliance with international coordination requirements. As the Commission has found, the public interest is served by "expanding the presence of U.S. satellite operators in [foreign markets]."[16] This, in turn, will strengthen U.S. operators' competitiveness and ability to create U.S. jobs and contribute to the nation's economic growth

(5) 47 C.F.R. § 25.118(a), (e) (modifications not requiring prior authorization). The Commission should revise subsection (a) to permit additional minor modifications not requiring prior Commission authorization. Such minor modifications may include: (i) earth station antenna height increases within the limits prescribed by the Federal Aviation Administration; and (ii) changes in authorized earth station coordinates exceeding the one-second variance (for stations operating on frequencies shared with terrestrial systems) or 10-second variance (for

[16] *See Intelsat LLC,* Order and Authorization, Order and Authorization, 19 FCC Rcd 2775, 2777 ¶ 9 (IB 2004).

stations operating on frequencies not shared with terrestrial systems) currently permitted under subsection (a)(4). Requiring applications for FCC approval of such minor, noncontroversial modifications is unnecessary and unduly burdensome, particularly when notification to the Commission would suffice.

Additionally, the Commission should revise subsections (a) and (e) so as to eliminate the requirement to use FCC Forms 312 and associated Schedules for filing notification of a minor modification. Allowing notification by letter filed on IBFS will be substantially less burdensome for licensees and is more consistent with the flexibility permitted for other notification filings.[17]

(6) 47 C.F.R. § 25.121 (license term and renewals). The Commission should revise subsection (a) to provide that the license term (along with other material terms and conditions) of a space station authorization will be specified in the instrument of authorization. This will provide for issuance of an official copy of a space station authorization comparable to the earth station instrument of authorization referenced in subsection (c). Other wireless stations (*e.g.,* earth stations and terrestrial wireless stations) are typically licensed pursuant to terms and conditions clearly specified in an FCC license document. Space stations, however, are authorized pursuant to stamp-grants and license orders, and their authorized terms and conditions often cannot be found in a single FCC license document. There is no public interest rationale for supporting this inconsistent treatment. Lack of a single space station authorization creates uncertainty and confusion for satellite operators and their customers, resulting in undue administrative burdens not imposed on other licensees as well as increased regulatory costs (*e.g.,* additional costs of compliance with multiple licensing documents and obtaining additional authorizations to correct or modify existing licenses).

[17] *See, e.g.,* 47 C.F.R. § 25.119(f) (permitting letter notification of consummation of a license assignment or transfer of control).

Subsection (a) should be further revised to apply the same 15-year license term to all satellite licenses, except DBS/SDARS/BSS licensed as broadcast facilities. Additionally, subsection (b) should be revised to codify the Commission's satellite renewal and replacement expectancy policies. Subsection (e) should be revised to: (i) delete reference to "for non-geostationary orbit satellites," and provide for the filing of applications for replacement authorization and license renewal of any space stations; and (ii) delete the requirement to file applications for registration renewals "no later than 30 days before" the license expiration date – such requirement is unnecessary, given that IBFS permits renewal filings any time prior to the expiration date. Collectively, the proposed revisions to Section 25.121 will promote regulatory parity among satellite licensees, and provide greater licensing certainty for satellite operators, allowing them to invest in their networks and services to consumers without fear of losing access to spectrum critical to their businesses.

(7) 47 C.F.R. § 25.131(h), (j) (filing requirements and registration for receive-only earth stations). The Commission should eliminate subsection (j)'s licensing requirement for receive-only earth stations accessing non-U.S.-licensed satellites not on the Permitted Space Station List. Such a requirement imposes an unfair and discriminatory burden not imposed on receive-only earth stations accessing U.S.-licensed satellites. Although the Commission has maintained that this restriction is consistent with U.S. treaty obligations,[18] the statutory basis for this assertion of jurisdiction remains unclear.[19] The Commission has further rationalized the licensing requirement by stating that the requirement offers a "necessary vehicle for Commission

[18] *See Comprehensive Review of Licensing and Operating Rules for Satellite Services,* Second Report and Order, 30 FCC Rcd 14713, 14812-13 ¶ 315 (2015) ("*2015 Satellite Licensing Reform*").

[19] *See Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Satellite Service in the United States,* Report and Order, 12 FCC Rcd 24094, ¶ 201 (1997); *Satellite Licensing Second Report and Order*, 18 FCC Rcd at12516-17, ¶¶ 20-22.

review of transmissions from non-U.S. licensed space stations entering the United States similar to the review we perform for transmissions from U.S.-licensed space stations."[20] This rationale, however, merely confirms that the Commission is seeking to regulate non-U.S.-licensed space stations wholly outside of its jurisdiction and in an apparent circumvention of U.S. treaty obligations.[21] It also remains unclear how the Commission's ability to review transmissions from non-U.S.-licensed space stations outside of its jurisdiction is necessary in the public interest. Accordingly, Section 25.131(j) should be repealed as it is no longer in the public interest.

The Commission also should delete subsection (h)'s requirement to file applications for registration renewals "no later than 30 days before" the registration expiration date for the same reasons that Section 25.121(e)'s similar requirement should be eliminated, as discussed in Section II(A)(6) above.

(8) 47 C.F.R. § 25.159 (limits on pending applications and unbuilt satellite systems). The Commission should eliminate subsection (d)'s "three-strikes" rule because it is unnecessary and unduly burdensome. The three-strikes rule does not prevent warehousing as it is intended to do. Instead, it acts as a deterrent for potential applicants to file for space station authorizations in the United States. The FCC has sufficient other deterrents in place, including its milestone requirement, which imposes a significant financial penalty. With other protections against

[20] *See 2015 Satellite Licensing Reform,* ¶ 315.

[21] Satellite parties have argued, for example, that requiring licensing of receive-only earth stations accessing non-U.S.-licensed satellites may violate national treatment obligations made by the United States under the General Agreement on Trade in Services and under the WTO Basic Telecom Agreement (at least with respect to services covered under the latter). *See Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Satellite Service in the United States,* Report and Order, 12 FCC Rcd 24094, ¶¶ 199-200 (citing commenters opposing receive-only licensing requirement).

spectrum warehousing in place, the only impact of the three-strikes rule is to direct satellite operators to other administrations to obtain space station authorizations.

B. Part 2 Rules

(1) 47 C.F.R. § 2.1203(b) (general requirement for entry into the U.S.A.). As proposed in a separate pending proceeding, the Commission should delete Section 2.1203(b) as overly burdensome and unnecessary.[22] As the Commission noted, the information required to be submitted under Section 2.1203(b) is already being collected by U.S. Customs and Border Protection (CBP), and thus is duplicative and unnecessary.[23]

(2) 47 C.F.R. § 2.1207 (examination of imported equipment). The Commission should revise this rule to require "the person or entity in possession," rather than "the ultimate consignee or subsequent owner," to make an imported radio frequency device available for examination or testing by the Commission. There are a variety of reasons why the possessor of the device may not be the ultimate consignee or owner of the device, and it is burdensome to impose an obligation to permit inspection on persons or entities not in possession of the device.

III. CONCLUSION

Based upon the foregoing, EchoStar urges the Commission to conduct a thorough review of rules that have a significant impact on small entities, including satellite operators and their customers. In carrying out its statutory mandate under the RFA, the Commission should determine that certain requirements under Parts 2 and 25 of its rules are duplicative, unduly burdensome, and no longer in the public interest. It is critical that the FCC take such action to ensure that its regulatory processes afford U.S. satellite operators the flexibility needed to offer

[22] *See Amendment of Parts 0, 1, 2, 15 and 18 of the Commission's Rules Regarding Authorization of Radiofrequency Equipment*, Notice of Proposed Rulemaking, 30 FCC Rcd 7725 (2015).

[23] *See id.*

cost-effective, innovative services to U.S. consumers on as timely basis as possible.

Accordingly, those requirements should be eliminated or revised.

Respectfully submitted,

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